

Regulatory Inspection Summary Report

Hunters Point Naval Shipyard

Inspection Date: June 9, 2017 Time: 9:10am to 11:30pm

Participants: EPA – Judy Huang, Lily Lee, Jackie Lane, Allaa Mageid
DTSC – Juanita Bacey
CB&I - Sean Orman
CB&I Randall Killpack

The US EPA team arrived at 9:10 AM and the guard let us into the site without a badge check. During this time, we drove around to have a visual scan of parcel G, the old lab and various buildings. We drove over the impermeable cover. At approximately 9:30 AM Lily, Jackie, Judy and Allaa met Jaunita Bacey (DTSC) in front of the CB&I trailer. After exchanging pleasantries with Sean Orman, he gave us an overview of the team's daily safety routine and happily reported no recent incidents.

The intended goal for this inspection consisted of investigating the following areas:

- (1) Landfill
- (2) Mercury
- (3) Groundwater
- (4) Lead chips

During the tour, we witnessed a wetlands restoration in Parcel E-2. As the crew dug deeper, the land naturally filled with water. Someone noted a slight petroleum smell escaping from the area, was not determined if the odor is coming from the machinery or the soil. Someone also had mentioned methane due to odors, but it was nothing of concern. At this point, our guide noted that the rain that occurred on Thursday June 8 was so mild that it was hardly noticeable in Hunter's Point.



Image 1. Wetland restoration in Parcel E-2.

Our guide Killpack reconfirmed that the background level of radioactive materials at the site is between 3-5 mrem which is average for the area. Most of the higher contaminated material, which drives up the average, is in the rocks and concrete but it is still naturally occurring. On Wednesday, a hot dot was found on the screen $\frac{3}{4}$ " in diameter. Our guide reported that delays usually happen on the screen but using the gamma-spec tool helps with this. Although there have been no stashes of rad waste found, 2 items within the same 100 yards was found and subsequently secured in a lockbox through efforts of ongoing sampling. Crew members create a randomly selected boring hole, take a sample, homogenous it and test it. The first object was found at a depth of 3-4 feet while the second object was found at a depth of 4-5 feet.



Image 2. Ongoing Sample efforts. Crewmembers taking a soil core.

The crew maintains conducting weekly chest level radiation checks at the site. The highest level reported during these weekly checks is 10 microrems, usually near the perimeter. This high level can be explained by the rocks that line the perimeter of the site which have naturally occurring radioactive material.

CBI found an American Avocet nest, considered an avian biological monitor by the Department of Interior, and were told to stay 50 yards away. This does not present any complications since the waterbody where the avocet lives is not actively being worked on nor will it be in the foreseeable future. It was dug up 4 feet deep and naturally filled with groundwater. Squirrels, ravens, coyote, various small and large birds were other animals that were reportedly seen at the site. There were poppies lining the fence where the avocet was found. We also saw an osprey nest in Parcel C.

Additionally, in Parcel C, we observed an active vapor soil extraction machine (SVE system).



Image 3. Osprey nest on lamp post in Parcel C.

In response to the Hunter's Point residents' complaints, we saw the contractors spraying the dirt roads with water from a truck in an attempt to keep the soil moist and not suspended in the air. After the soil is sifted, the contractors separate each substance found into piles and spray each pile with a clear or green soil adhesive to keep particles from each pile blowing away. Each clean pile is designated by a sign. The pile of wood appeared to be the largest. Piles that are covered with a black tarp contain flight risks, ie garbage. The piles appeared to be managed in accordance with dust control and storm water requirements. The crew also sprays the radiation screening yard (RSY) pads to keep the dust from becoming suspended in the air as well. The crew noted that the wind is the worst in the afternoon.



Image 4. Pile appears green in photo due to soil adhesive.

CB&I are using the RSI system (gigantic sodium-iodide detector) checking for energy levels. With respect to the RSY pads, the crew noted no significant issues. They reiterated that they try to keep rocks greater than 6 inches out of the pads. They scan at a rate of a quarter meter per second. Although the RSI can see accurately for 12 inches, CB&I are using a 9 inch screening limit to be conservative. We noticed many small pink flags marking certain areas in the soil reflecting that an HP will look more closely at these areas.



Image 5. Large rocks that are found are put into piles. These might interfere with the radiation screening.



Images 6 and 7. Pink flags represent where HPs will have to come back and look.

In terms of the lead chips monitoring, we observed the swell in between building 281, 214 and 252. We saw quite a few paint chips there. The swell between buildings 252 and 281 was as expected, no paint chips. While observing the swells in Parcel C, we discovered that some sand bags around a storm drain appear to be old and ripped open. Jaunita offered to follow up with the PRP to get these replaced.



Image 8. Many large and small paint chips in a storm water swell.

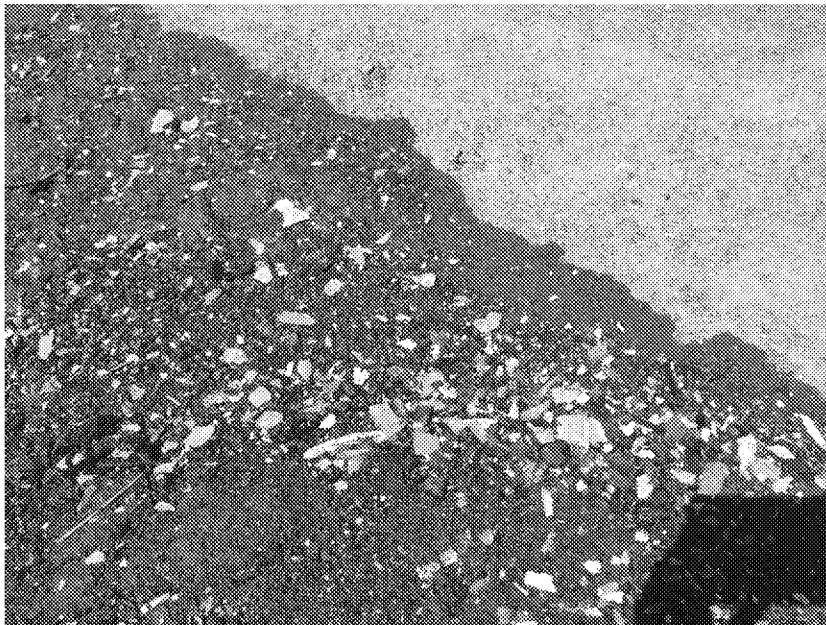


Image 9. Close up of paint chips.

Overall we did not see any deviations from the work plan. We departed the site at approximately 11:20 AM. This concluded our June 9th inspection.